HOUSING REQUIREMENTS AND MARKET ANALYSIS

2003-2008



HOLLOMAN AIR FORCE BASE NEW MEXICO

HOUSING REQUIREMENTS AND MARKET ANALYSIS 2003 – 2008

PREPARED FOR:

HOLLOMAN AIR FORCE BASE, NEW MEXICO
AIR COMBAT COMMAND
U.S. AIR FORCE
AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE

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ACRONYMS AND ABBREVIATIONS

ACC - Air Combat Command

AFB – Air Force Base

BAH – Basic Allowance for Housing

BAS – Basic Allowance for Subsistence

DoD – Department of Defense

FW – Fighter Wing

FY - Fiscal Year

HQ – Headquarters

HRMA – Housing Requirements and Market Analysis

HUD – U.S. Department of Housing and Urban Development

K&E – Key and Essential

MAHC - Maximum Allowable Housing Cost

MFH – Military Family Housing

MSA – Metropolitan Statistical Area

OSD – Office of the Secretary of Defense

OOP - Out-Of-Pocket

RMC – Regular Military Compensation

UEPH – Unaccompanied Enlisted Personnel Housing

U.S. - United States

VHAS – Variable Housing Allowance Survey

XPM – Plans/Manpower

GLOSSARY OF TERMS

Accompanied Personnel – Military members who are eligible to receive with-dependent housing allowances.

Basic Allowance for Housing (BAH) – The housing allowance paid to eligible members at the installation.

Basic Allowance for Subsistence (BAS) – The subsistence allowance paid to eligible military members at the installation.

Floor Requirement – The minimum military family housing assets required for the installation by policy determination.

Historic Housing – U.S. Government owned housing units listed on or eligible for the National Register of Historic Places under the National Historic Preservation Act.

Housing Market Area – The geographic area defined by the Air Force for the purposes of determining the Total Military Family Housing Requirement. The boundaries are based on the greater of a 60-minute commute or 20 miles from the installation's headquarters building or major work centers.

Key and Essential (K&E) – Housing for all key and essential military and civilian personnel.

Maximum Allowable Housing Cost (MAHC) – The highest rental cost that determines the affordability of private sector rental housing for military personnel.

Military Community – Housing for ten percent of military families by grade.

Military Families – Those accompanied personnel, less military couples and voluntarily separated personnel, eligible for housing at the installation.

Military Family Housing (MFH) – All housing controlled by the U.S. Government for use by military members at the installation including military owned housing, housing under lease to the military service, and housing under privatization agreements with the military service.

Military Housing Area – The geographic area defined by OSD for the purposes of determining housing allowances for accompanied and unaccompanied personnel. The boundaries are formed by the zip codes (typically conforming to county lines) and do not reflect a standard commuting distance. Also referred to as the BAH survey market area.

Military Market Share – The number of rental housing units that the military households are expected to be able to rent.

Out-Of-Pocket (OOP) expenses – The expense that the military member would pay in addition to their housing allowance to equal the local median housing cost for any particular pay grade. This expense by pay grade is the same for every installation.

Private Sector Shortfall – The difference between those military members requiring private sector rental housing and the military market share.

Quality of Life – Housing for members whose Regular Military Compensation (RMC) is less than 50 percent of the median family income.

Regular Military Compensation (RMC) – The sum of annual standard base pay, housing and subsistence allowances, and a tax adjustment to reflect the exemption from Federal Income Tax of the housing and subsistence allowances.

Study Period – The five-year period from 2003 to 2008 that are the effective dates of this analysis.

Total Military Family Housing Requirement – The number of family housing assets that the U.S. Government must provide, in addition to that housing available in the private sector, to adequately house military families at the installation. Determined as the sum of the Floor Requirement plus any shortfall of housing in the private sector on a pay grade basis.

Unaccompanied Personnel – Military personnel who are eligible to receive without-dependents housing allowances.

EXECUTIVE SUMMARY

This Housing Requirements and Market Analysis (HRMA) determines the Total Military Family Housing Requirement for personnel at Holloman Air Force Base (AFB), New Mexico. The Office of the Secretary of Defense (OSD) policies allow for a minimum number of military family housing units, the Floor Requirement, at each installation. The HRMA assesses the ability of the private sector to potentially house military families under the assumption that the only U.S. Government-controlled housing available in five years would be the Floor Requirement.

The analysis is dynamic in nature assessing the housing market each year of the five-year period. It considers annual changes, if any, in total authorized manpower and changes in the demand for private sector housing from military families assuming the installation attempts to adjust from its current inventory of U.S. Government-controlled housing to its Floor Requirement. A military market share is computed for each year of the analysis based on competition of only those military and civilian households actively seeking housing during the year and available rental units either turning over or newly constructed in the market. The Total Military Family Housing Requirement is determined as the sum of the Floor Requirement plus any shortfall of private sector housing in the fifth year of the analysis.

Based on the analysis of the five-year period between 2003 and 2008, authorized changes in manpower, the assumed adjustment in U.S. Government-controlled housing inventory to the Floor Requirement by 2008, and projected changes in the private sector housing market, the Total Military Family Housing Requirement for Holloman AFB is 1,506 units (Table ES-1). There is a *deficit* of 93 units as the Total Military Family Housing Requirement is greater than the projected inventory of 1,413 units.

Table ES-1. Balance of Military Family Housing Requirements, 2008

Component	Housing Units
Military Family Housing Inventory (FY 2004)	1,413
Total Military Family Housing Requirement Floor Requirement Private Sector Shortfall	1,506 246 1,260
Deficit/(Surplus)	93

Source: Parsons Corporation, 2003

The findings of the Holloman AFB HRMA conclude:

- By the projected year, authorized manpower will decrease by 33 positions to a total 3,896 personnel. There are expected to be 2,630 accompanied personnel and 1,266 unaccompanied personnel assigned to the installation with 2,028 military families and 551 unaccompanied personnel seeking housing in the private sector (Table ES-2).
- There is an initial shortfall of 201 MFH units for military families and 213 private sector rental units for unaccompanied personnel in 2003.
- ◆ There is 61.6 percent of the rental inventory that is considered unsuitable for military personnel based on minimum DoD and Air Force standards. The largest component of the unsuitable structures is mobile homes (30.8 percent) followed by units with a quality or safety concern that were identified by base housing personnel during the BAH survey process (24.4 percent). There are also other units that lack certain physical characteristics (6.5 percent).
- ◆ The dynamic model incorporates military and civilian turnover and new construction on an annual basis and indicates that an additional 134 military families would be successful in obtaining suitable rental units over the next five years if only the Floor Requirement were available to house them on base.
- ♦ There is a projected deficit of 93 MFH units for military families and a projected shortfall of 538 private sector rental units for unaccompanied personnel in 2008.

Table ES-2. Summary of Military Housing Requirements, 2003 & 2008

Component	2003	2008
Authorized Description Destrict	2.000	0.000
Authorized Permanent Party	3,929	3,896
Accompanied Personnel	2,650	2,630
Military Couples and Voluntary Separations	359	356
Military Families	2,291	2,274
In Military Family Housing	1,645	1,506
In Suitable Private Sector Housing		
Homeowners	564	552
Renters	82	216
Private Sector Shortfall (included in MFH)	380	1,260
Unaccompanied Personnel	1,279	1,266
In On-Base Housing	986	619
In Suitable Private Sector Housing		
Homeowners	61	96
Renters	19	13
Private Sector Shortfall	213	538

Source: Parsons Corporation, 2003



The Holloman AFB Total Military Family Housing Requirement is detailed in Table ES-3. The Floor Requirement was determined as the greatest of the following criteria for each pay grade:

- **Military Community** Housing for ten percent of military families by grade.
- ♦ **Key and Essential** Housing for all key and essential military and civilian personnel.
- ♦ Historic Housing U.S. Government owned housing units listed on or eligible for the National Register of Historic Places under the National Historic Preservation Act.
- ◆ Quality of Life Housing for members whose Regular Military Compensation (RMC) is less than 50 percent of the local median family income.

The Total Military Family Housing Requirement (1,506 units) is the sum of the Floor Requirement (246 units) and the private sector shortfall (1,260 units) on a pay grade basis.

Table ES-3. Holloman Air Force Base Total Military Family Housing Requirement, 2008

	Military	Military	Key &	Historic	Quality	Floor	Private Sector	Total Military Housing
Pay Grade						Requirement		
O7+	1	0	1	0	0	1	0	1
06	8	1	11	0	0	11	0	11
O5	51	6	11	0	0	11	1	12
O3 O4	62	-	4	0	0	6	10	
03	168		0	0	0	17	43	
O2	4		0	0	0	0	3	3
01	22	-	-	0	0	2	_	_
_				0	0			
Officers	316	32	27	U	U	48	72	120
E9	23	3	1	0	0	3	3	6
E8	49		0	0	0	5	21	26
E7	205	-	0	0	0	21	103	
E6	364		•	0	0	36		
E5	628			0	0	63		
E4	537			0	0	54		
E3	138	_		0	0	15		
E2	12		o O	0	0	1	11	12
E1	2		0	0	0	0	2	2
Enlisted	1,958			0	0	198		
Lillisted	1,900	190				190	1,100	1,300
Total	2,274	230	28	0	0	246	1,260	1,506

Source: Parsons Corporation, 2003

HOUSING REQUIREMENTS AND MARKET ANALYSIS

2003-2008



HOLLOMAN AIR FORCE BASE NEW MEXICO

CHAPTER 1. INTRODUCTION

This Housing Requirements and Market Analysis (HRMA) for Holloman Air Force Base (AFB) is a detailed study to determine Military Family Housing (MFH) assets the U.S. Government must provide to ensure that all families the installation has the responsibility to house have access to acceptable housing. Acceptable housing is defined by the Air Force as affordable, within a reasonable commute, of good quality, and with the proper number of bedrooms for each family.

This report and the analysis on which the results are based follow Air Force guidance for implementing the HRMA process as advocated by the Office of the Secretary of Defense (OSD) to assure a consistent determination of housing requirements across military services in support of the planning and programming processes.

This section describes the following:

- ♦ Methodology
- ♦ Key Assumptions
- ♦ Report Organization

METHODOLOGY

Air Force policy establishes a minimum family housing requirement (Floor Requirement) for military housing assets at the installation. The Floor Requirement is based on four criteria as projected for the fifth year of the analysis (2008):

- ♦ The need for a military community,
- Housing for personnel in key and essential positions,
- Preservation of historic housing, and
- ♦ Housing for the personnel whose level of Regular Military Compensation (RMC) is below 50 percent of the median family income in the local area.

The HRMA determines if the private sector could potentially provide sufficient affordable and suitable housing for military families under the assumption that only the Floor Requirement will be available by the projected year of the analysis.

The methodology used in this HRMA simulates a dynamic process of adjustment between market area housing demand and supply. The analysis incorporates changes in military manpower, competing civilian demand, and rental housing supply over a five-year period estimating the military market share for each year of the analysis. The military market share is based, in part, on competition amongst military families, unaccompanied personnel, and civilians who actively seek housing during the year. The Total Military Family Housing Requirement is the sum of the Floor Requirement plus any shortfall in private sector housing.

This analysis distinguishes between all rental housing and that rental housing estimated to be acceptable and available for military personnel within the installation's housing market area. The analysis uses a market segment approach, dividing the housing market into segments by cost (rent, utility costs, and renter's insurance) and number of bedroom categories. The military share of housing in each segment is the proportion of available, affordable, adequate-quality housing in that segment equal to the proportion of the military requirement to the total competing housing demand within the segment.

The dynamic process applies these major assumptions:

- The U.S. Government-controlled housing inventory is hypothetically adjusted to the Floor Housing Requirement in five years. Where inventories differ from the Floor, the number of military families occupying U.S. Government housing would change each year until by the fifth year of the analysis only the Floor housing would be occupied.
- ♦ Market competition only occurs for rental housing units that become available for rent during the year. Rental housing becomes available when current occupants terminate their occupancy for whatever purpose or additional housing units enter the rental market through new construction or net conversions from owner-occupancy. Estimated changes, if any, in the rental housing supply are based on the potential rental market response to any assumed increase in demand from civilian population growth, from military families moving from U.S. Government-controlled housing to the private sector, or any increases in military personnel authorizations.
- Competing demand each year are those households, both military and civilian, who actively seek rental housing during the year. These include households that choose to seek different rental housing or relocate to a different market area; military households currently occupying unsuitable housing; and new households entering the housing market. The new households include military households newly authorized to the installation, military families who are part of the simulated transition from MFH to the private sector, and civilian households new to the housing market.
- Unaccompanied personnel not required to live in on-base housing are competed in the private sector housing market as well. Military families and unaccompanied personnel who elect to be homeowners are considered suitably housed under current policy.

The shortfall or surplus of the private sector housing market is determined in the fifth year of the analysis as the difference between the military share and the military rental requirement in that segment. When there is insufficient available and affordable private sector housing of acceptable quality, a Private Sector Shortfall exists.

The final step of the HRMA is the determination of the Total Military Family Housing Requirement as the sum of the Floor Requirement and the Private Sector Shortfall, if any.

Figure 1-1. Housing Requirements and Market Analysis Process Summary

- Determine housing market area based on the greater of a 60-minute commute or 20 miles from the installation's headquarters building or major work centers.
- Establish the military family housing requirement for each year of the analysis.
- Determine the Floor Requirement:
 - ♦ Military Community
 - ♦ Key and Essential
 - ♦ Historic Housing
 - ♦ Quality of Life
- Determine potential private sector requirement for each year of the analysis such that only the Floor Requirement remains occupied by the fifth year.
- Determine competing military and civilian demand for suitable and unsuitable occupied housing.
- Determine available suitable rental supply.
- Compute military market share for each military segment:
 - Military Market Share = ((Competing Military Demand/Total Competing Demand) x Available Suitable Supply) + Suitable Housing Occupied by Military Not Seeking Other Housing
- Compare military market share to competing military requirement to determine a shortfall, if any, in the fifth year.
- Establish Total Military Housing Requirement as the sum of the Floor Requirement plus any Private Sector Shortfall.

KEY ASSUMPTIONS

The following assumptions used in the HRMA for Holloman AFB have an impact on the results of the analysis:

METHODOLOGY

◆ This HRMA is based on a methodology that determines military market share based on suitable housing available for rent and households seeking rental housing each year during a five-year period.

HOUSING SUPPLY

- Only housing within the housing market area is considered in the analysis. The housing market area is based on the greater of a 60-minute commute or 20 miles from the installation's headquarters building or major work centers.
- ◆ The number of housing units and the distribution of housing by number of bedrooms and rent categories are based on the 2000 Census and the 1990 Census of Housing.
- Rental housing includes only units on less than ten acres of land for which cash rent is paid and excludes seasonal rental housing and rental housing restricted to low income or elderly households for which military personnel are not eligible.
- ♦ Homeowner housing units excludes houses on more than ten acres of land and those with a business or medical office located on the property.

HOUSING SUITABILITY

- ◆ Air Force standards for judging suitability of community housing are based on Department of Defense (DoD) 4165.63-M and are detailed in Chapter 5.
- Suitability estimates are determined by on-site surveys of rental units throughout the housing market area, interviews with property managers, local planning agency staff, and base housing representatives, Census data, and other published information.
- Mobile homes are not considered suitable housing for military personnel.
- ♦ All homeowner occupied housing, with the exception of mobile homes, is considered suitable housing. Detailed quantification of the homeowner market is not required as the analysis focuses on the rental market.

HOUSING DEMAND

Changes in civilian rental housing demand are based on population and economic projections for the region, census information, and residential construction permit data. Civilian households living in income or agerestricted housing are not considered part of civilian demand for rental housing.

- Changes in military family housing requirements are based on current and projected manpower authorizations. Military demand for private sector housing each year is based on the assumption that by the fifth year, military families will occupy only the Floor Requirement. Each year an additional one-fifth of military families currently occupying MFH in excess of the Floor Requirement will seek private sector housing.
- Military demand competing for housing in each year consists of the proportion of military families and unaccompanied personnel assumed to be residing in suitable turnover rental housing at the start of the year plus all of the military families and unaccompanied personnel residing in unsuitable rental housing at the start of the year plus any overall change in demand from additional manpower authorized to the installation.
- Civilian demand competing for housing in each year consists of the proportion of civilian households assumed to be residing in turnover rental housing at the start of the year plus any net change in civilian demand from civilian households entering or leaving the market area.

HOUSING SUPPLY GROWTH

♦ Additional housing units are projected for a market area based on trends in housing development since 1990, including net changes in new units between the 1990 and 2000 censuses, and units permitted since 2000. Typical local planning standards for approval of new housing units are assumed to continue in place through 2008.

RENTAL RATES

• Any future increases in rental costs should be reflected in rising Basic Allowance for Housing (BAH) rates for military personnel. Consequently, rental-housing affordability for military members should be unchanged in 2008 from 2003. For the purpose of this analysis, rental costs are held constant at their 2003 levels.

MILITARY HOUSING AFFORDABILITY

♦ The Maximum Allowable Housing Cost (MAHC) is the local median housing cost as determined by the BAH process for each pay grade. MAHC includes BAH plus Out-of-Pocket (OOP) expenses as established by the U.S. Department of Defense (DoD) each year. For the purposes of this analysis, the relationship between MAHC and rental prices is calculated for 2003 and held constant through 2008.

REGULAR MILITARY COMPENSATION

• Regular Military Compensation (RMC) is the sum of the current average base pay for each pay grade, base-specific BAH, the Basic Allowance for Subsistence (BAS), and a tax adjustment. For this analysis, RMC is calculated for 2003 and assumed to remain constant through 2008.

MILITARY FAMILY HOUSING

◆ The MFH inventory includes units that are projected to be constructed, demolished, and/or operational through the Fiscal Year (FY) 2004 Military Family Housing Construction Program.

MILITARY HOUSING REQUIREMENTS

- Housing requirements for the authorized manpower are based on the number of military families as estimated from base-specific accompaniment rates, voluntary separations, and family size of currently assigned personnel using data obtained from the installation.
- Bedroom entitlements are based on each dependent child having a bedroom and a minimum bedroom entitlement based on military member's rank.
- ◆ Unaccompanied personnel in pay grade E4 (with more than three years of service) and pay grades E5 and above are assumed to require private sector housing. The remaining unaccompanied personnel in pay grade E4 and pay grades E1-E3 are assumed to be living in U.S. Government quarters or in one-bedroom units in the private sector unless the base can provide adequate justification to the contrary.
- Military personnel homeownership and rental rates are derived from both the 1994-1997 Variable Housing Allowance Survey (VHAS) and a recent survey conducted by the base housing office and the assumption that personnel currently residing on base would become renters if required to live off base.

REPORT ORGANIZATION

This HRMA for Holloman AFB is presented in the following chapters:

- ♦ Chapter 2. The Housing Market Area
- Chapter 3. Military Housing Requirement
- Chapter 4. The Floor Requirement
- ♦ Chapter 5. Private Sector Housing
- ♦ Chapter 6. Rental Housing Demand
- ♦ Chapter 7. Private Sector Rental Housing Analysis
- Chapter 8. Total Military Family Housing Requirement
- Chapter 9. Findings
- Chapter 10. References
- ♦ Chapter 11. Contacts

CHAPTER 2. THE HOUSING MARKET AREA

Holloman AFB is located approximately eight miles southwest of the City of Alamogordo in south central New Mexico. The base lies in Otero County. The housing market area includes portions of Dona Ana and Otero counties. The regional economy and population demographics impact the housing market within the housing market area. This chapter discusses these impacts in the following sections:

- ♦ Housing Market Area Definition
- ♦ Population
- ♦ Regional Economy and Employment
- ♦ Housing Market

HOUSING MARKET AREA DEFINITION

The Air Force currently defines the housing market area as the area within the greater of a 60-minute commute or 20 miles from the installation's headquarters building or major work centers during peak traffic in privately owned vehicles. The housing market area boundary shown in Figure 2-1 was determined based on average travel speeds during peak traffic periods along major highways and city streets. The housing market area is defined as follows:

- ♦ Extends to the Lincoln County line along U.S. Highway 54 and is limited by the Mescalero Apache Indian Reservation to the north
- ♦ Includes the City of Cloudcroft and approaches, but does not include, the City of Mayhill along U.S. Highway 82 to the east
- ♦ Limited to the City of Orogrande along U.S. Highway 54 due to the restricted boundaries of White Sands Missile Range and Fort Bliss to the south
- Extends through the White Sands Missile Range, but does not include any portion of the City of Las Cruces along U.S. Highway 70 to the west
- ♦ Most traveled routes include U.S. Highway 54 (north-south) and U.S. Highways 70 and 82 (east-west)

Figure 2-2 shows the BAH survey market area and a 20-mile radius for comparison purposes. The City of Alamogordo is the only major population and housing center in the housing market area. Figure 2-3 shows where personnel live by zip code in relation to the housing market area boundary. The actual location of residences of personnel assigned to the base does not impact the determination of the housing market area boundary; however, it should be noted that over 95 percent of personnel appear to live within 60 minutes of Holloman AFB.

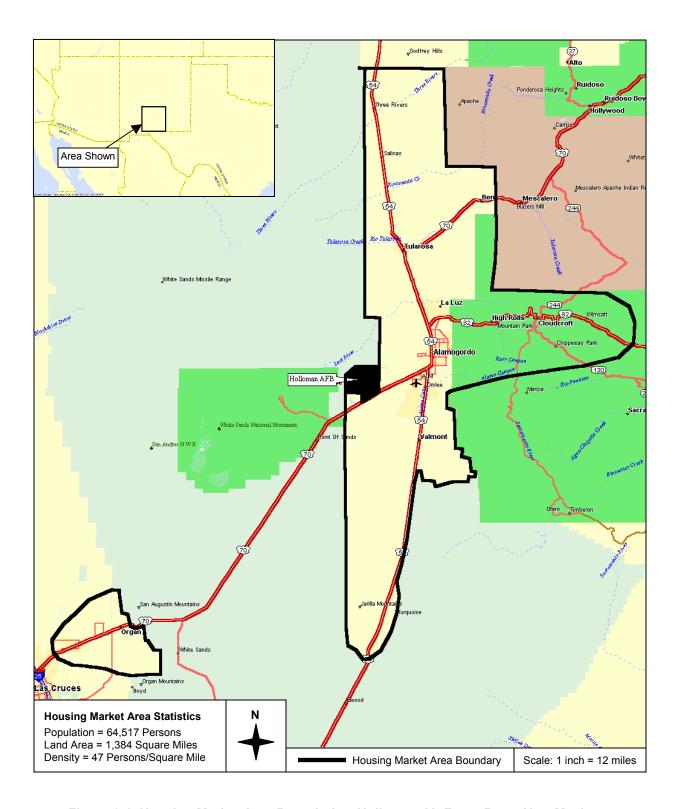


Figure 2-1. Housing Market Area Boundaries, Holloman Air Force Base, New Mexico



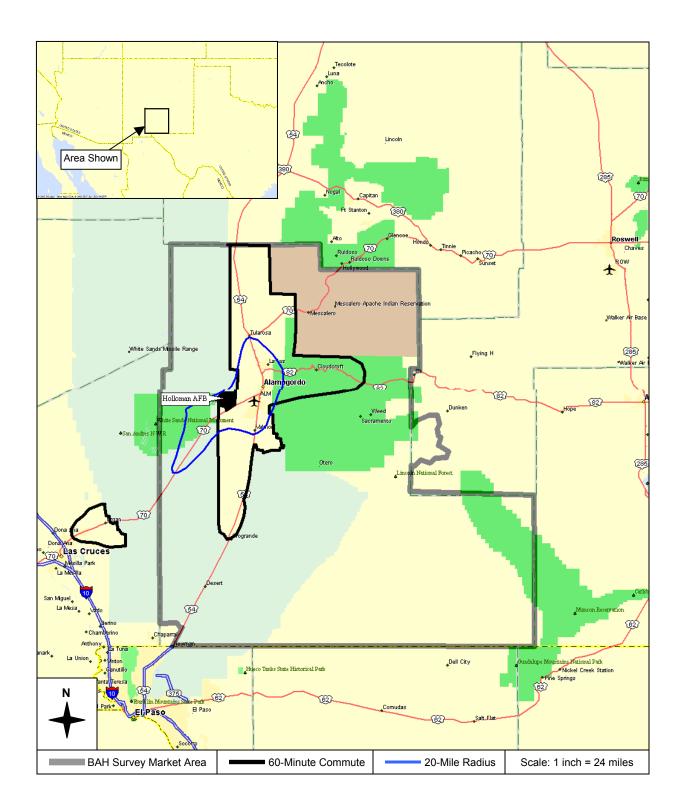


Figure 2-2. Basic Allowance for Housing Survey, 20-Mile Radius, and 60-Minute Commute Boundaries



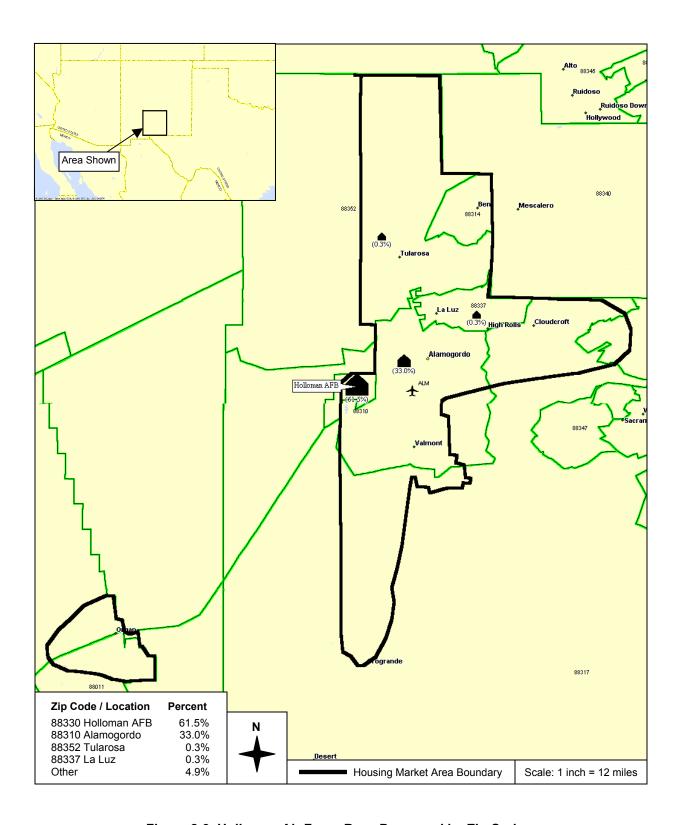


Figure 2-3. Holloman Air Force Base Personnel by Zip Code



POPULATION

The total population of counties contained within the housing market area was estimated to be 247,766 in 2003 (Table 2-1). Approximately 26 percent of the total population lies within the housing market area boundaries, which amounts to 64,517 persons. The housing market area population has increased by 23.3 percent since 1990. Otero County contains the largest portion of the housing market area population (85.2 percent). Otero County is the 8th most populated county in New Mexico and ranks 781st in total population out of the 3,141 county equivalents around the country. The City of Alamogordo has an estimated population of 35,400 and is the largest population and housing center in the housing market area.

Table 2-1. Housing Market Area Population, 2003

County	Population	Population in Housing Market Area	Percent of Area in Housing Market Area	Portion of Total Housing Market Area Population
Dona Ana	183,762	9,577	5.2%	14.8%
Otero	64,004	54,940	85.8%	85.2%
Total	247,766	64,517	26.0%	100.0%

Source: Claritas, Inc., 2003; U.S. Bureau of the Census, 2001; Woods & Poole Economics, Inc., 2002; Parsons Corporation, 2003

Table 2-2 shows population growth since 1980 and expected population growth through 2010 for selected areas around Holloman AFB. Both Dona Ana and Otero counties experienced robust increases in population from 1990 to 2000, 28.9 and 20.0 percent respectively. Dona Ana County's population increase ranks in the top 15 percent of all county equivalents around the country over the last decade. Dona Ana County is also expected to lead percentage growth over the next ten years.

Table 2-2. Population Estimates for Selected Areas, 1980-2010

Population					Po	ercent Change	1
County	1980	1990	2000	2010	1980-1990	1990-2000	2000-2010
Dona Ana	96,340	135,510	174,682	206,826	40.7%	28.9%	18.4%
Otero	44,665	51,928	62,298	68,170	16.3%	20.0%	9.4%
Total	141,005	187,438	236,980	274,996	32.9%	26.4%	16.0%

Source: Claritas, Inc., 2003; U.S. Bureau of the Census, 1991 and 2001; Woods & Poole Economics, Inc., 2002; Parsons Corporation, 2003

REGIONAL ECONOMY AND EMPLOYMENT

The City of Alamogordo and Otero County best define the south central New Mexico region as it relates to Holloman AFB. Otero County is the second largest county in New Mexico in terms of land area and contains 16 communities. The City of Alamogordo is the largest population and housing center in the region and serves as the economic and social hub of the Tularosa Basin. Alamogordo developed as a railroad town through such industries as logging, tourism, and health care. The area's economic presence was solidified in 1942 with the establishment of Holloman AFB, which is currently the largest employer in the region. Other leading employers include White Sands Missile Range, Alamogordo Public Schools, City of Alamogordo, and Gerald Champion Regional Medical Center.

The economic base of the area is concentrated in government, service, and retail trade jobs. Other sectors of the economy, like construction and finance, insurance, and real estate, have also been performing well. Currently, total employment of counties partially contained within the housing market area is approximately 107,200. Employment in the housing market area is expected to increase by approximately 16.3 percent through the year 2010 (Table 2-3). This is greater than the expected 12.7 percent growth in national employment levels over the same period. It should be noted that employment in the immediate area around Holloman AFB totals approximately 28,400 and is expected to grow at a somewhat slower rate than national employment levels through 2010.

Table 2-3. Employment Growth for Selected Areas, 1980-2010

	Employment				Percent Change		
County	1980	1990	2000	2010	1980-1990	1990-2000	2000-2010
Dona Ana	39.689	58.175	74.662	88.286	46.6%	28.3%	18.2%
Otero	22,977	25,867	27,818	30,876	12.6%	7.5%	11.0%
Total	62,666	84,042	102,480	119,162	34.1%	21.9%	16.3%

Source: Woods & Poole Economics, Inc., 2002; Parsons Corporation, 2003

Employment by sector data (Table 2-4) shows the overall structure of the economy in the Holloman AFB region (Otero County). Government, services, and retail trade are the main industries in the area, accounting for 75.3 percent of employment. The government sector ranks as the largest sector, representing 32.9 percent of total employment. The construction sector has been the fastest growing major industry since 1990, followed by the finance, insurance, and real estate sector. As a percent, the military sector represents 15.3 percent of employment. The importance of the military sector to the area economy is well above average. During 2002, the military sector contributed approximately \$200 million of the \$735 million in inflation-adjusted earnings generated in Otero County.

Table 2-4. Employment by Industrial Sector in the Housing Market Area, 1990 & 2002

			Percent Change	As Percent
Sector	1990	2002	1990 to 2002	of Total, 2002
Farm	561	557	-0.7%	1.9%
Agricultural Services	162	259	59.9%	0.9%
Mining	42	35	-16.7%	0.1%
Construction	870	1,848	112.4%	6.5%
Manufacturing	1,339	838	-37.4%	2.9%
Transportation, Comm. & Public Utilities	1,165	1,580	35.6%	5.6%
Wholesale Trade	306	342	11.8%	1.2%
Retail Trade	3,822	4,257	11.4%	15.0%
Finance, Insurance & Real Estate	932	1,584	70.0%	5.6%
Services	5,981	7,782	30.1%	27.4%
Federal Civilian Government	2,315	2,009	-13.2%	7.1%
Federal Military Government	5,916	4,333	-26.8%	15.3%
State and Local Government	2,456	2,975	21.1%	10.5%
Total	25,867	28,399	9.8%	100.0%

Source: Woods & Poole Economics, Inc., 2002; Parsons Corporation, 2003

The current unemployment rate for the housing market area is 6.9 percent as of December 2002 (Table 2-5). The current rate is higher than both the 5.0 percent rate for State of New Mexico and the U.S. rate, which is 5.7 percent. Local area unemployment rates have historically been higher than both the State of New Mexico and U.S. rates.

Table 2-5. Annual Average Unemployment Rates for Selected Areas, 1990-2002

County/Area	1990	1995	2000	Current
D	7.00/	0.50/	7.00/	5.7 0/
Dona Ana	7.8%	8.5%	7.0%	5.7%
Otero	7.1%	6.6%	5.3%	7.1%
New Mexico	6.5%	6.3%	5.0%	5.0%
United States	5.6%	5.6%	4.0%	5.7%
Housing Market Area	7.2%	6.9%	5.6%	6.9%

Source: Bureau of Labor Statistics, 2003

HOUSING MARKET

The City of Alamogordo is the only major population and housing center in the housing market area. The total number of private housing units within the housing market area boundaries was estimated to be 27,101. Based on local building trends, population and household projections, and other information, the total housing supply has grown at an average annual rate of 1.8 percent since 1990. The current housing supply consists of 16,443 homeowner units, 7,526 rental units, and 3,132 other units. As with most areas, homeowner units account for a majority of the housing units.

Table 2-6. Private Sector Housing Units by Area, 2003

County	Total Units	Homeowner Units	Rental Units	Other
Dona Ana	3,149	2,289	623	237
Otero	23,952	14,154	6,903	2,895
Total	27,101	16,443	7,526	3,132

Note: Other units include vacant units not classified as homeowner or rental (i.e., vacant units held for seasonal, recreational or occasional use, for migrant workers, for occupancy by a caretaker or janitor, or for other reasons of the owner).

Source: Holloman AFB Housing Office, 2003; U.S. Bureau of the Census, 1991 and 2001; Claritas, Inc., 2003; Parsons Corporation, 2003

HOMEOWNER MARKET

There are approximately 16,443 homeowner units in the housing market area in 2003, representing 60.7 percent of the total housing stock. The majority of these units are single-family type homes. The supply of homeowner housing has increased by 2.1 percent per year since 1990.

The Alamogordo single-family real estate market remains healthy as shown in Figure 2-4. Home prices have continued to push upward, while sales have been consistent over the last several years. The trend is still rather impressive considering the economic conditions that have existed over the two years. Robust population and employment growth, combined with relatively low interest rates and prices, continue to drive the local homeowner market. The vacancy rate for owner-occupied housing is approximately 3.5 percent in the housing market area and is consistent with the strong demand for homeowner units on a state and national level. Nationally, homeowner vacancy rates average 1.7 percent while the State of New Mexico has a higher homeowner vacancy rate of 2.4 percent (U.S. Bureau of the Census, 2003).

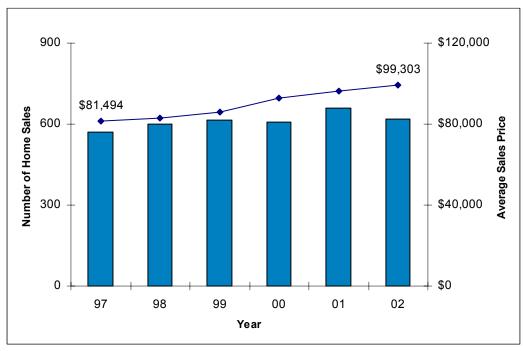


Figure 2-4. Number of Home Sales and Average Sales Price, 1997-2002

Source: Otero County Association of Realtors, 2003; Parsons Corporation, 2003

An average priced home in the Alamogordo area costs \$99,303 as of year-end 2002. The change in home prices has outpaced the rate of inflation since 1997 (2.3 percent), increasing by 4.0 percent per year. The change in average sales prices has been relatively consistent over the last five years.

As with most other markets, only higher-ranking personnel can comfortably afford an average priced home assuming they have the resources for an adequate down payment. However, in most of the housing market area, homeowner units are still affordable and good values are available to many lower ranking personnel as well. The local single-family real estate market is expected to meet the needs of military personnel electing to purchase homes in the housing market area.

All indications are that the local single-family market will remain healthy for at least the next few years. Potential inhibiting factors include the persistent rise in unemployment and expected increases in interest rates, which could hinder consumer confidence and the ability to afford ever increasing home prices. Five-year projections indicate single-family construction levels with approximately 370 homes being permitted and built per year in the housing market area.

RENTAL MARKET

The current inventory of rental housing in the housing market area is 7,526 units. This total excludes MFH units associated with Holloman AFB, but includes certain restrictive units and units considered unsuitable by Air Force definition. These units will be detailed and removed later in the analysis.

The rental market consists of approximately 40 percent single-family rental housing, 17 percent duplex, triplex, and quadraplex type attached rental housing, 13 percent traditional apartments, and 30 percent mobile homes. The supply of rental housing has increased by 1.1 percent per year since 1990. The median rental unit was built in the late 1970s and is in average condition.

Figure 2-5 shows multi-family building permits and rental vacancy rates in the local area (Otero County) since 1980. There have been 464 units permitted during the last decade. This represents a small increase in permitting and construction since the last surge in development during the mid 1980s. There were 406 multi-family permits issued during the 1980s.

A net total of 983 new units were added to the housing market area rental inventory since 1990, including traditional apartment type units, duplex, triplex, and quadraplex type attached units and single-family rental homes. It should be noted that approximately 400 of the new units are single-family rental homes that were made available in the area over the last decade and approximately 450 were traditional apartments.

Figure 2-5. Multi-Family Building Permits and Vacancy Rates, 1980-2002

Source: U.S. Bureau of the Census, 1991 and 2001; Parsons Corporation, 2003

The multi-family vacancy rate currently stands at 6.5 percent. The overall rental vacancy rate is 5.8 percent after factoring in single-family and duplex type rentals, which have fewer numbers of vacancies and represent a larger portion of the market. The vacancy rate in the housing market area is lower than the national average rental vacancy rate of 9.0 percent and the State of New Mexico vacancy rate of 11.5 percent (U.S. Bureau of the Census, 2003). Part of the reason the housing market area rate is lower than both the state and national rates is due to the fact that unsuitable areas, which generally contain significant levels of vacancies, are eliminated from consideration when calculating the vacancy rate used in this analysis.

There are several types of senior, income, and other restrictive housing facilities in the area. Age restrictive units (i.e., senior's only apartments and independent living facilities) are considered multi-family rentals and will be removed from the analysis, while assisted living and nursing facilities are classified as group quarters by the U.S. Bureau of the Census and are already excluded from the rental inventory. Income and other restrictive units (i.e., Low Income Housing Tax Credit, Rural Development, Tax-Exempt Bond Financing, HOME Investment Partnership, conventional public housing, etc.) are also removed from the analysis. A total of 1,003 restrictive rental units currently exist in the housing market area. It should be noted that Section 8 certificates and vouchers are not actual units, but a type of assistance that allows the renter to occupy any unit that accepts this program. There are over 160 units of Section 8 assistance allocated in the housing market area.

CHAPTER 3. MILITARY HOUSING REQUIREMENTS

This chapter reports the number of military families and unaccompanied personnel requiring housing at Holloman AFB in the following sections:

- ♦ Authorized Manpower
- Military Families
- ♦ Unaccompanied Personnel

AUTHORIZED MANPOWER

The authorized manpower at Holloman AFB consists of 3,929 service members in 2003 and is projected to decrease to 3,896 in 2008 (Table 3-1). The authorized manpower includes all personnel that housing office has the responsibility to house. Table 3-2 provides a summary of these personnel by organization. Manpower data and demographic information were obtained from Headquarters Air Combat Command, Plans/Manpower (HQ ACC/XPM) and the Holloman AFB Housing Office.

Table 3-1. Holloman Air Force Base Manpower Authorizations, 2003 & 2008

		Current Ye	ar, 2003		P	rojected Y	ear, 2008	
Pay Grade	49 th FW	Other	Tenants	Total	49 th FW	Other	Tenants	Total
								<u>.</u>
O7+	1	0	0	1	1	0	0	1
O6	8	0	3	11	7	0	3	10
O5	34	12	9	55	35	11	9	55
O4	41	15	20	76	41	14	19	74
O3	114	67	47	228	114	69	46	229
O2	4	1	7	12	4	1	7	12
01	10	4	22	36	11	4	22	37
Officers	212	99	108	419	213	99	106	418
E9	26	0	1	27	25	0	1	26
E8	51	0	5	56	52	0	5	57
E7	213	4	24	241	213	4	24	241
E6	371	9	65	445	370	9	65	444
E5	778	19	109	906	768	19	109	896
E4	1,082	23	16	1,121	1,068	23	16	1,107
E3	564	11	2	577	558	11	2	571
E2	111	2	1	114	110	2	1	113
E1	23	0	0	23	23	0	0	23
Enlisted	3,219	68	223	3,510	3,187	68	223	3,478
	•	•	•		•			<u> </u>
Total	3,431	167	331	3,929	3,400	167	329	3,896

Source: HQ ACC/XPM, 2003; Holloman AFB Housing Office, 2003

Table 3-2. Manpower Authorizations by Organization, 2003 & 2008

Organization	2003	2008
Host		
49th Fighter Wing	3,431	3,400
8 th /9 th /20 th Fighter Squadrons	123	123
7th Combat Training Squadron	24	24
Misc. Host	20	20
Tenants		
4 th Space Surveillance Squadron	148	148
46 th Test Group	36	35
726 th Test Squadron	26	26
Misc. Tenants	121	120
Total	3,929	3,896

Source: HQ ACC/XPM, 2003; Holloman AFB Housing Office, 2003

The military family housing requirement is based on the number of military families. Not all personnel receiving with-dependent housing allowances constitute a single household. The number of accompanied personnel must be adjusted for households with more than one military member and those households in which the accompanied member chooses to leave dependents at another location. Tables 3-3 and 3-4 provide the number of military families for 2003 and 2008, respectively.

Table 3-3. Breakdown of Personnel Requiring Housing, 2003

Pay Grade	Accompanied Personnel	Military Couples	Voluntary Separations	Military Families	Unaccompanied Personnel
		-	-		
O7+	1	0	0	1	0
O6	11	1	1	9	0
O5	52	0	1	51	3
O4	68	3	1	64	8
O3	181	9	5	167	47
O2	6	1	1	4	6
O1	22	1	0	21	14
Officers	341	15	9	317	78
E9	26	1	1	24	1
E8	53	2	3	48	3
E7	227	17	5	205	14
E6	403	28	10	365	42
E5	751	106	10	635	155
E4	641	85	12	544	480
E3	186	31	16	139	391
E2	20	3	5	12	94
E1	2	0	0	2	21
Enlisted	2,309	273	62	1,974	1,201
Total	2,650	288	71	2,291	1,279

Table 3-4. Breakdown of Personnel Requiring Housing, 2008

Pay Grade	Accompanied Personnel	Military Couples	Voluntary Separations	Military Families	Unaccompanied Personnel
O7+	1	0	0	1	0
O6	10	1	1	8	0
O5	52	0	1	51	3
O4	66	3	1	62	8
O3	182	9	5	168	47
O2	6	1	1	4	6
O1	23	1	0	22	14
Officers	340	15	9	316	78
					-
E9	25	1	1	23	1
E8	54	2	3	49	3
E7	227	17	5	205	14
E6	402	28	10	364	42
E5	743	105	10	628	153
E4	633	84	12	537	474
E3	184	30	16	138	387
E2	20	3	5	12	93
= <u>-</u> E1	2	0	0	2	21
Enlisted	2,290	270	62	1,958	1,188
	,	-	-	,	,
Total	2,630	285	71	2,274	1,266

MILITARY FAMILIES

The 2003 military housing family requirement is based on 2,291 families (Table 3-5). The requirement for two-bedroom units is 50 percent of the total while three- and four-bedroom units comprise 34 and 16 percent, respectively. There are 2,274 military families projected for 2008 with approximately the same bedroom requirement distribution indicated above (Table 3-6).

Grade, family size, and composition determine housing requirements. Bedroom entitlements are based on one bedroom per dependent child and a minimum bedroom requirement by rank. Junior enlisted families require a minimum of a two-bedroom unit, while families of field grade officers require a minimum of a three-bedroom unit and senior officers require a minimum of a four-bedroom unit.

Table 3-5. Military Families, 2003

Table 3-6. Military Families, 2008

	Numb	er of Bedr	ooms			Number of Bedrooms			
Pay Grade	Two	Three	Four+	Total	Pay Grade	Two	Three	Four+	Total
O7+	0	0	1	1	07+	0	0	1	1
O6	0	0	9	9	O6	0	0	8	8
O5	0	35	16	51	O5	0	35	16	51
O4	0	46	18	64	O4	0	44	18	62
O3	103	45	19	167	O3	104	45	19	168
O2	2	1	1	4	O2	2	1	1	4
O1	14	4	3	21	O1	15	4	3	22
Officers	119	131	67	317	Officers	121	129	66	316
E9	0	17	7	24	E9	0	16	7	23
E8	0	33	15	48	E8	Ö	34	15	49
E7	0	147	58	205	E7	0	147	58	205
E6	135	132	98	365	E6	134	132	98	364
E5	348	187	100	635	E5	344	185	99	628
E4	414	103	27	544	E4	409	101	27	537
E3	116	18	5	139	E3	116	17	5	138
E2	11	1	0	12	E2	11	1	0	12
E1	2	0	0	2	E1	2	0	0	2
Enlisted	1,026	638	310	1,974	Enlisted	1,016	633	309	1,958
Total	1,145	769	377	2,291	Total	1,137	762	375	2,274

Source: Holloman AFB Housing Office, 2003

UNACCOMPANIED PERSONNEL

There are a total of 1,279 unaccompanied service members for whom Holloman AFB has housing responsibility. Of the total number of unaccompanied personnel, 293 are in grade E4 and above and require private sector housing (Table 3-7). It should be noted that E4 personnel with over three years of service are no longer required to live on-base. This will generally require 75 percent of personnel in grade E4 to live off-base. Holloman AFB currently has no E4 personnel living off-base assuming the 1,047 Unaccompanied Enlisted Personnel Housing (UEPH) assets are assigned starting from grade E1 and working up until all rooms are occupied. Bedroom requirements vary from one to three based on OSD compensation standards.

There are projected to be a total of 1,266 unaccompanied service members affiliated with Holloman AFB in 2008. Of the total unaccompanied personnel, 647 are in grades E4 and above (Table 3-8). The increase is due to the assumption that 75 percent of E4 personnel would live off-base by 2008.

Table 3-7. Unaccompanied Personnel Housing Requirement, 2003

Table 3-8. Unaccompanied Personnel Housing Requirement, 2008

	Number of Bedrooms				Number of Bedrooms				
Pay Grade	One	Two	Three	Total	Pay Grade	One	Two	Three	Total
07+	0	0	0	0	07+	0	0	0	0
O6	0	0	0	0	O6	0	0	0	0
O5	0	0	3	3	O5	0	0	3	3
O4	0	0	8	8	O4	0	0	8	8
O3	0	47	0	47	O3	0	47	0	47
O2	0	6	0	6	O2	0	6	0	6
O1	0	14	0	14	01	0	14	0	14
Officers	0	67	11	78	Officers	0	67	11	78
E9	0	1	0	1	E9	0	1	0	1
E8	0	3	0	3	E8	0	3	0	3
E7	0	14	0	14	E7	0	14	0	14
E6	0	42	0	42	E6	0	42	0	42
E5	155	0	0	155	E5	153	0	0	153
E4	0	0	0	0	E4	356	0	0	356
Enlisted	155	60	0	215	Enlisted	509	60	0	569
Total	155	127	11	293	Total	509	127	11	647

Source: Holloman AFB Housing Office, 2003

CHAPTER 4. THE FLOOR REQUIREMENT

The current inventory of MFH at Holloman AFB totals 1,444 traditional on-base units. There are currently 1,219 occupied units, 30 vacant units, and 195 inactive units. The average occupancy rate over the last three fiscal years has been over 99 percent. The MFH inventory is expected to decrease to 1,413 units in 2004 and remain at this level through 2008.

In the current year of this analysis, all MFH units available upon completion of the FY 2004 Military Family Housing Construction Program are initially retained. The installation must demonstrate that the entire inventory has historically been occupied or an adjustment is made to reflect actual conditions. In this case, military rental demand in excess of a three-year average occupancy of 1,265 units is competed in the local community in 2003. The number of military households currently suitably housed in the community and an initial baseline of needs are established as the starting point for this analysis. The dynamic process then incorporates these results and applies turnover and market supply response mechanisms to generate an estimate of the number of military that are suitably housed on an annual basis through the projected year.

By the projected year of this analysis, the installation is assumed to have transitioned to a minimum military housing requirement, the Floor Requirement, which is the target for the on base MFH inventory if the local community can house the balance of military requirements. Thus, all military rental demand in excess of the Floor Requirement is competed in the local community by 2008. The Floor Requirement is determined by the greatest of the following four criteria on the basis of pay grade:

- Military Community Housing for ten percent of military families by grade.
- ♦ **Key and Essential** Housing for all key and essential military and civilian personnel.
- ♦ Historic Housing U.S. Government owned housing units listed on or eligible for the National Register of Historic Places under the National Historic Preservation Act.
- ◆ Quality of Life Housing for members whose RMC is less than 50 percent of the local median family income.

This section displays the requirement under each criterion and then presents the Floor Requirement.

MILITARY COMMUNITY HOUSING REQUIREMENT

The requirement for an on-base community for military families recognizes the value of the cohesive attributes of a military community to the morale of its members. The presence of housing and community support facilities to accommodate 10 percent of the military families is established as part of the minimum requirement.

In 2008, there is a military community housing requirement of 230 housing units based on 2,274 military families (Table 4-1).

KEY AND ESSENTIAL HOUSING REQUIREMENT

Currently, there are 28 key and essential positions at Holloman AFB. These positions are expected to remain unchanged in the projected year (Table 4-2).

Table 4-1. Military Community Housing Requirement, 2008

Table 4-2. Key and Essential Housing Requirement, 2008

	Numbe	r of Bedro	oms			Numbe	r of Bedro	oms	
Pay Grade	Two	Three	Four+	Total	Pay Grade	Two	Three	Four+	Total
O7+	0	0	0	0	O7+	0	0	1	1
06	0	0	1	1	06	0	Ö	11	11
O5	0	4	2	6	O5	0	8	3	11
O4	0	4	2	6	04	0	3	1	4
O3	10	5	2	17	O3	0	0	0	0
O2	0	0	0	0	O2	0	0	0	0
01	2	0	0	2	O1	0	0	0	0
Officers	12	13	7	32	Officers	0	10	17	27
E9	0	2	1	3	E9	0	0	1	1
E8	Ö	3	2	5	E8	Ö	Ö	Ö	0
E7	0	15	6	21	E7	0	0	0	0
E6	13	13	10	36	E6	0	0	0	0
E5	34	19	10	63	E5	0	0	0	0
E4	41	10	3	54	E4	0	0	0	0
E3	12	2	1	15	E3	0	0	0	0
E2	1	0	0	1	E2	0	0	0	0
E1	0	0	0	0	E1	0	0	0	0
Enlisted	101	64	33	198	Enlisted	0	0	1	1
Total	113	77	40	230	Total	0	10	18	28

Source: Parsons Corporation, 2003

HISTORIC HOUSING REQUIREMENT

U.S. Government owned historic housing listed on, or eligible for, the National Register of Historic Places must be maintained as a historical resource. In the case of Holloman AFB, there are no housing units designated as historic (Tables 4-3).

Table 4-3. Historic Housing Requirement, 2008

	Numbe	r of Bedro	oms	
Pay Grade	Two	Three	Four+	Total
O7+	0	0	0	0
O6	0	0	0	0
O5	0	0	0	0
O4	0	0	0	0
O3	0	0	0	0
O2	0	0	0	0
01	0	0	0	0
Officers	0	0	0	0
E9	0	0	0	0
E8	0	0	0	0
E7	0	0	0	0
E6	0	0	0	0
E5	0	0	0	0
E4	0	0	0	0
E3	0	0	0	0
E2	0	0	0	0
E1	0	0	0	0
Enlisted	0	0	0	0
Total	0	0	0	0
	• "		·	

Source: Parsons Corporation, 2003

QUALITY OF LIFE HOUSING REQUIREMENT

The quality of life housing requirement is determined by the number of military family renters in each pay grade whose RMC falls below 50 percent of the local median family income of \$37,000 (Otero County) as published by the U.S. Department of Housing and Urban Development (HUD). The RMC is determined for each pay grade as the sum of standard base pay, the local BAH, BAS, and a tax adjustment. The RMC for 2003 is presented in Table 4-4. The local median family income is assumed to remain in the same relative proportion to RMC with the result that no personnel would meet this requirement in 2008 (Table 4-5).

Table 4-4. Regular Military Compensation, 2003

		Basic	Basic		
		Allowance	Allowance for	Tax	Regular Military
Pay Grade	Base Pay	for Housing	Subsistence	Adjustment	Compensation
O7+	\$109,147	\$14,664	\$2,006	\$6,504	\$132,321
O6	\$92,851	\$14,496	\$2,006	\$6,168	\$115,521
O5	\$75,138	\$14,376	\$2,006	\$6,120	\$97,640
O4	\$63,478	\$13,116	\$2,006	\$5,227	\$83,827
O3	\$49,789	\$11,292	\$2,006	\$3,614	\$66,701
O2	\$37,688	\$8,712	\$2,006	\$2,814	\$51,221
01	\$27,311	\$7,560	\$2,006	\$2,042	\$38,919
E9	\$54,198	\$11,832	\$2,914	\$3,866	\$72,810
E8	\$43,632	\$10,704	\$2,914	\$2,663	\$59,912
E7	\$37,189	\$9,672	\$2,914	\$2,401	\$52,176
E6	\$30,791	\$8,736	\$2,914	\$2,122	\$44,563
E5	\$24,835	\$7,416	\$2,914	\$1,756	\$36,921
E4	\$19,951	\$6,456	\$2,914	\$1,453	\$30,774
E3	\$16,715	\$6,456	\$2,914	\$1,505	\$27,589
E2	\$15,480	\$6,456	\$2,914	\$1,516	\$26,366
E1	\$13,810	\$6,456	\$2,914	\$1,468	\$24,647

Source: U.S. Department of Defense, 2003; Parsons Corporation, 2003

Table 4-5. Quality of Life Housing Requirement, 2008

Number of Bedrooms							
Two	Three	Four+	Total				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
0	0	0	0				
	Two 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Two Three 0	Two Three Four+ 0 0 0 0 0 <td< td=""></td<>				

FLOOR REQUIREMENT

The Floor Requirement is the greatest of the military community, key and essential, historic housing, and the quality of life requirements on the basis of pay grade. The Floor Requirement, or minimum number of MFH units Holloman AFB should maintain, totals 246 housing units in 2008 (Table 4-6). The bedroom requirements are set by the bedroom requirements of the criteria on which the minimum is based for each pay grade.

Table 4-6. Floor Requirement, 2008

	Number	r of Bedro	oms	
Pay Grade	Two	Three	Four+	Total
O7+	0	0	1	1
O6	0	0	11	11
O5	0	8	3	11
04	0	4	2	6
O3	10	5	2	17
O2	0	0	0	0
01	2	0	0	2 48
Officers	12	16	20	48
E9	0	2	1	3
E8	0	3	2	5
E7	0	15	6	21
E6	13	13	10	36
E5	34	19	10	63
E4	41	10	3	54
E3	12	2	1	15
E2	1	0	0	1
E1	0	0	0	0
Enlisted	101	64	33	198
Total	113	80	53	246

CHAPTER 5. PRIVATE SECTOR HOUSING

In 2003, there are an estimated 27,101 private sector housing units in the housing market area (Table 5-1). The current private sector housing inventory includes 16,443 homeowner units, 7,526 rental units, and 3,132 other units. It is projected that housing construction will increase over the next five years consistent with expected population and employment growth accounting for historical building cycles and additional military demand. The total private housing inventory is expected to increase by 1.8 percent per year through 2008 to a total of 29,619 units, including 18,278 homeowner units, 7,849 rental units, and 3,492 other units.

Table 5-1. Private Sector Housing in the Housing Market Area, 2003 & 2008

Housing Units	Current Year, 2003	Projected Year, 2008
Homeowner Housing	16,443	18,278
Rental Housing	7,526	7,849
Other	3,132	3,492
Total	27,101	29,619

Note: Other units include vacant units not classified as homeowner or rental (i.e., vacant units held for seasonal, recreational or occasional use, for migrant workers, for occupancy by a caretaker or janitor, or for other reasons of the owner). Source: U.S. Bureau of the Census, 1991 and 2001; Claritas, Inc., 2003; Parsons Corporation, 2003

RENTAL HOUSING MARKET

In order to establish if there is sufficient affordable and suitable rental housing to meet military needs, the analysis quantifies rental housing by cost (monthly rent, selected utility costs, and renter's insurance) categories, number of bedrooms in the unit, and the suitability of the housing by Air Force standards.

The analysis considers the number of vacant rental units in the market place. Vacancies play an important role in the housing market. Rental vacancies occur at times of tenant turnover and facilitate needed maintenance. Vacancies also serve as a signal to the landlords when rent increases are likely to be accepted, when rent reductions are needed, or when to consider the economic/financial feasibility of constructing additional rental units.

When demand or changes in demand are relatively stable, the rental housing supply tends to adjust over time until a long-term natural vacancy rate is realized. At this natural vacancy rate, the existing vacancies no longer signal a need for additional rental housing or for rental price changes and the market is thought to be in relative balance. The natural rate is influenced by rental prices, construction costs, interest rates, past and projected growth rates, and other market characteristics.

RENTAL HOUSING SUPPLY

The 2003 inventory of rental housing in the housing market area is estimated at 7,526 units. The rental inventory includes 1,820 units without bedrooms or cash rent, seasonal units, and restrictive units. After subtracting these units, there are a total of 5,706 rental units, which are summarized in Table 5-2 by monthly rental rates (including utilities and renters insurance) and number of bedrooms. Two-bedroom and smaller units make up 58 percent of total rental housing. Three-bedroom units make up 36 percent of rental housing, and the remaining six percent have four or more bedrooms.

Table 5-2. Total Rental Housing Supply (Occupied And Vacant), 2003

	N				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	191	164	355
\$1250-\$1500	0	12	237	55	304
\$1000-\$1249	13	29	414	36	492
\$900-\$999	22	62	247	34	365
\$800-\$899	47	140	362	11	560
\$700-\$799	94	176	246	9	525
\$600-\$699	138	259	230	0	627
\$500-\$599	245	629	139	0	1,013
\$400-\$499	229	585	0	0	814
\$300-\$399	232	317	0	0	549
<\$300	102	0	0	0	102
Total	1,122	2,209	2,066	309	5,706

Note: Excludes units without bedrooms or cash rent, seasonal units, and age and income restrictive units.

Source: Holloman AFB Housing Office, 2003; U.S. Bureau of the Census, 1991 and 2001; Claritas, Inc., 2003; Parsons Corporation, 2003

SUITABLE RENTAL HOUSING

Air Force standards for judging suitability of community housing are based on DoD 4165.63-M (U.S. Department of Defense, 1993) as interpreted by the Air Force. Housing must be within a reasonable commute distance of the base and not in an area designated by the base commander as unacceptable for health or safety reasons. The housing must be no more expensive than BAH plus an OOP amount set annually by the DoD. Housing must meet minimum size standards; however, size alone is generally not a sufficient consideration to make housing unsuitable.

The dwelling must be well maintained and structurally sound. It must not pose a health or safety hazard. It must be a complete unit with private entrance, bathroom, and kitchen for the sole use of its occupants. The rooms must be so arranged that the kitchen, a bathroom, the living room, and bedrooms can be entered without passing through bedrooms. The unit must have air conditioning or a similar cooling system and a permanently installed, adequately vented heating system if the base is located in a climate where these are to be included in Government construction by DoD

standards. The dwelling must have adequate electrical service. It must have washer/dryer connections or accessible laundry facilities on the premises. The unit must have hot and cold running potable water. It must have sufficient sanitary and sewage disposal facilities.

Rental mobile homes are not considered suitable housing for military personnel. All homes occupied by their military owners are considered to be acceptable, regardless of any other criteria. Suitability estimates are based on on-site surveys of rental units throughout the housing market area, interviews with property managers, local planning agency staff, and base housing representatives, Census data, and other published information and generally reflect the exclusion of areas identified by the base commander as unsuitable.

Table 5-3 shows that 61.6 percent of the rental inventory is considered unsuitable for military personnel based on minimum DoD and Air Force standards. The largest component of the unsuitable structures is mobile homes (30.8 percent) followed by units with a quality or safety concern that were identified by base housing personnel during the BAH survey process (24.4 percent). There are also other units that lack one of the physical characteristics (i.e., private entrance, bathroom, kitchen, etc.) identified above (6.5 percent). There are no other units with quality or safety concerns that do not represent a sufficient portion of a specific Census boundary to be excluded from the BAH survey.

Table 5-3. Determination of Unsuitable Rental Housing, 2003

County	Total Rental Units	Physical Condition	Quality or Safety	Mobile Homes		Total Unsuitable by AF Definition
Dona Ana	623	20	0	473	0	493
Otero	6,903	468	1,833	1,845	0	4,146
Total	7,526	488	1,833	2,318	0	4,639
As Percent of Total		6.5%	24.4%	30.8%	0.0%	61.6%

Note: Units shown in the physical condition or mobile home categories where removed from the quality or safety category to avoid double counting.

In 2003, 61.6 percent of all applicable rental housing is considered unsuitable for military personnel based on minimum DoD and Air Force standards. A total of 3,514 rental units were found unacceptable for military personnel by multiplying the unsuitability factor by the number of rental units shown in Table 5-2, which excludes units with no bedrooms or cash rent, seasonal units, and age and income restrictive units. Suitable rental housing in the housing market area is estimated at 2,192 units in 2003 (Table 5-4). A higher proportion of low-cost units are unsuitable.

Table 5-4. Suitable Rental Housing, 2003

	N				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	191	164	355
\$1250-\$1500	0	12	237	55	304
\$1000-\$1249	13	29	414	30	486
\$900-\$999	20	58	236	0	314
\$800-\$899	43	131	74	0	248
\$700-\$799	51	148	0	0	199
\$600-\$699	28	194	0	0	222
\$500-\$599	21	43	0	0	64
\$400-\$499	0	0	0	0	0
\$300-\$399	0	0	0	0	0
<\$300	0	0	0	0	0
Total	176	615	1,152	249	2,192

VACANT RENTAL HOUSING

There are an estimated 331 vacant rental units in the housing market area. The overall vacancy rate is estimated at 5.8 percent (Table 5-4). The vacancy rates differ by price segment with lower cost, smaller units typically experiencing a higher vacancy rate than the average, due to location and size. Suitable rental vacancies are estimated at 129 in 2003 (Table 5-4).

Table 5-5. Vacant Rental Housing, 2003

	N				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	0	12	12
\$1250-\$1500	0	6	12	0	18
\$1000-\$1249	0	2	23	6	31
\$900-\$999	0	13	17	0	30
\$800-\$899	0	10	14	6	30
\$700-\$799	6	17	31	3	57
\$600-\$699	11	9	23	0	43
\$500-\$599	29	32	6	0	67
\$400-\$499	6	23	0	0	29
\$300-\$399	11	3	0	0	14
<\$300	0	0	0	0	0
Total	63	115	126	27	331

Source: Holloman AFB Housing Office, 2003; U.S. Bureau of the Census, 1991 and 2001; Claritas, Inc., 2003; Parsons Corporation, 2003

Table 5-6. Suitable Vacant Rental Housing, 2003

Number of Bedrooms						
Price Range	One	Two	Three	Four+	Total	
>\$1500	0	0	0	12	12	
\$1250-\$1500	0	6	12	0	18	
\$1000-\$1249	0	2	23	4	29	
\$900-\$999	0	10	12	0	22	
\$800-\$899	0	8	10	0	18	
\$700-\$799	4	12	0	0	16	
\$600-\$699	8	6	0	0	14	
\$500-\$599	0	0	0	0	0	
\$400-\$499	0	0	0	0	0	
\$300-\$399	0	0	0	0	0	
<\$300	0	0	0	0	0	
Total	12	44	57	16	129	

NET CHANGE IN SUITABLE RENTAL HOUSING

The rental housing supply could increase or decrease based on historical responses to demand for new rental housing or demolition/conversion of rental housing to other uses. Based on interviews of local planners and developers, the rental inventory is expected to experience a net increase of 117 units over the study period (Table 5-6). The change in the rental supply was based on currently planned projects considering historical building cycles, conversion of single-family homeowner units, and market response to increased military demand. The inventory of suitable rental housing is estimated to total 2,309 units by 2008 (Table 5-7).

Table 5-7. Net Change in the Suitable Rental Housing, 2003-2008

	N				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	29	25	54
\$1250-\$1500	0	2	36	8	46
\$1000-\$1249	2	4	62	(3)	65
\$900-\$999	3	9	36	Ò	48
\$800-\$899	7	20	(49)	0	(22)
\$700-\$799	12	25	Ò	0	37
\$600-\$699	(7)	(40)	0	0	(47)
\$500-\$599	(21)	(43)	0	0	(64)
\$400-\$499	Ó	Ò	0	0	Ò
\$300-\$399	0	0	0	0	0
<\$300	0	0	0	0	0
Total	(4)	(23)	114	30	117

Note: Negative numbers reflect the fact that no new construction is expected to occur in lower price categories and the continued deterioration of these rental units over the study period as the percentage of unsuitable rentals is expected to remain unchanged.

Table 5-8. Suitable Rental Housing, 2008

	Number of Bedrooms				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	220	189	409
\$1250-\$1500	0	14	273	63	350
\$1000-\$1249	15	33	476	27	551
\$900-\$999	23	67	272	0	362
\$800-\$899	50	151	25	0	226
\$700-\$799	63	173	0	0	236
\$600-\$699	21	154	0	0	175
\$500-\$599	0	0	0	0	0
\$400-\$499	0	0	0	0	0
\$300-\$399	0	0	0	0	0
<\$300	0	0	0	0	0
Total	172	592	1,266	279	2,309

Source: Holloman AFB Housing Office, 2003; U.S. Bureau of the Census, 1991 and 2001; Claritas, Inc., 2003; Parsons Corporation, 2003

RENTAL COST INCREASES

Because local BAH is expected to keep pace with area rental costs, relative affordability of rental housing is projected to be the same in 2008 as in 2003. Consequently, the relationship between BAH and area rental costs is held constant through 2008.

CHAPTER 6. RENTAL HOUSING DEMAND

The military's share of the suitable rental housing supply is determined by the competition for the housing in each market segment. The competing demand for private sector rental housing is described in the following sections:

- ♦ Civilian Rental Housing Demand
- ♦ Military Families Requiring Rental Housing
- ♦ Unaccompanied Personnel Requiring Rental Housing

CIVILIAN RENTAL HOUSING DEMAND

Civilian housing demand is comprised of the housing demand by civilian households residing within the housing market area and any military personnel residing in the area who are not a housing responsibility of the installation. Housing demand by these households is determined by their housing decisions based on factors such as income, location, and personal preferences. Civilian demand for income or agerestricted housing is not included.

Total current civilian demand for housing in the housing market area is 4,681 units. Table 6-1 presents a summary of civilian rental housing demand in the housing market area by price and bedroom categories for 2003. The civilian rental housing demand in 2008 is 4,976 (Table 6-2) based on household trends and accounting for changes in off-base military demand.

Table 6-1. Civilian Rental Demand, 2003

	Number of Bedrooms				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	186	116	302
\$1250-\$1500	0	5	219	42	266
\$1000-\$1249	11	21	381	23	436
\$900-\$999	19	39	224	26	308
\$800-\$899	41	103	339	4	487
\$700-\$799	77	126	209	5	417
\$600-\$699	110	197	202	0	509
\$500-\$599	188	471	130	0	789
\$400-\$499	194	444	0	0	638
\$300-\$399	192	248	0	0	440
<\$300	89	0	0	0	89
Total	921	1,654	1,890	216	4,681

Table 6-2. Civilian Rental Demand, 2008

	Number of Bedrooms				
Price Range	One	Two	Three	Four+	Total
>\$1500	0	0	215	139	354
\$1250-\$1500	0	6	255	50	311
\$1000-\$1249	13	25	440	24	502
\$900-\$999	22	45	260	27	354
\$800-\$899	47	119	339	4	509
\$700-\$799	89	147	208	5	449
\$600-\$699	129	199	201	0	529
\$500-\$599	188	475	130	0	793
\$400-\$499	196	447	0	0	643
\$300-\$399	193	250	0	0	443
<\$300	89	0	0	0	89
Total	966	1,713	2,048	249	4,976

Source: Holloman AFB Housing Office, 2003; U.S. Bureau of the Census, 1991 and 2001; Claritas, Inc., 2003; Parsons Corporation, 2003

MILITARY FAMILIES REQUIRING RENTAL HOUSING

Military families who seek housing in the private sector housing must compete in the market for both homeowner and rental housing. Tenure rates are used to estimate homeowner and rental demand for military families. These rates can be expected to vary with income, allowances, mortgage interest rates, and the general price levels of the real estate market.

Homeownership and rental rates applied in this study were derived from 1994-1997 VHAS estimates and a recent survey conducted by the base housing office of the homeownership status for those members who are eligible for housing allowances (Table 6-3). This analysis is based on the assumption that all personnel occupying MFH units would be renters of private sector housing if only the Floor Requirement were available to them. Military family homeownership rates are assumed to remain at their 2003 levels over the study period.

The housing requirements for military families are presented in tables 6-4 through 6-7. In the current year, 564 families are estimated to require homeowner housing and the remaining 462 families require rental housing. Approximately 77 percent of the rental requirements are in the two-bedroom category, while three- and four-bedroom rental requirements respectively account for nine and 14 percent of the total rental demand. In 2003, those military family renters in excess of the MFH inventory of 1,265 units are competed in the local community.

For the projected year, 552 families are estimated to require homeowner housing and the remaining 1,476 families are expected to require rental housing. Approximately 50 percent of the rental requirements will be in the two-bedroom category, while three- and four-bedroom rental requirements will respectively account for 38 and 12 percent of the total rental demand. The shift to larger bedroom private sector rental requirements over the study period is due to the fact that only the Floor Requirement is assumed to be available by 2008.

Table 6-3. Tenure Rates for Military Families

Pay Grade	Percentage Homeowners	Percentage Renters
O7+ O6 O5 O4 O3 O2 O1	70% 56% 73% 54% 76% 40% 25%	30% 44% 27% 46% 24% 60% 75%
E9 E8 E7 E6 E5 E4 E3 E2 E1	69% 75% 81% 75% 65% 32% 10% 0%	31% 25% 19% 25% 35% 68% 90% 100%

Note: These rates were applied only to those

personnel residing in the community. Source: U.S. Air Force, 1995-1998

Table 6-4. Military Family Homeowner Requirement, 2003

Table 6-5. Military Family Homeowner Requirement, 2008

				· ,					
	Numbe	r of Bedro	oms			Numbe	r of Bedro	oms	
Pay Grade	Two	Three	Four+	Total	Pay Grade	Two	Three	Four+	Total
07+	0	0	0	0	07+	0	0	0	0
06	Ö	0	Ö	Ö	06	Õ	0	0	0
O5	0	12	7	19	O5	0	12	6	18
04	Ō	12	8	20	04	Ö	11	8	19
O3	44	0	0	44	O3	45	0	0	45
O2	0	0	0	0	O2	0	0	0	0
O1	2	0	0	2	O1	2	0	0	2
Officers	46	24	15	85	Officers	47	23	14	84
E9	0	12	4	16	E9	0	11	4	15
E8	0	14	4	18	E8	0	14	4	18
E7	0	66	14	80	E7	0	66	14	80
E6	28	12	63	103	E6	27	8	63	98
E5	116	0	49	165	E5	113	0	48	161
E4	87	0	2	89	E4	86	0	2	88
E3	8	0	0	8	E3	8	0	0	8
E2	0	0	0	0	E2	0	0	0	0
E1	0	0	0	0	<u>E1</u>	0	0	0	0
Enlisted	239	104	136	479	Enlisted	234	99	135	468
Total	285	128	151	564	Total	281	122	149	552

Source: Parsons Corporation, 2003



Table 6-6. Military Family Rental Requirement, 2003

Table 6-7. Military Family Rental Requirement, 2008

Number of Bedrooms						
				T . 4 . 1		
Pay Grade	Two	Three	Four+	Total		
O7+	0	0	0	0		
O6	0	0	0	0		
O5	0	4	2	6		
04	0	10	6	16		
O3	14	0	0	14		
O2	1	0	0	1		
O1	5	0	0	5		
Officers	20	14	8	42		
E9	0	5	2	7		
E8	0	4	1	5		
E7	0	16	3	19		
E6	9	4	21	34		
E5	63	0	27	90		
E4	181	0	4	185		
E3	71	0	0	71		
E2	8	0	0	8		
E1	1	0	0	1		
Enlisted	333	29	58	420		
Total	353	43	66	462		
Note: MFH uni	ts are retai	ned in 2003.				

Number of Bedrooms						
Pay Grade	Two	Three	Four+	Total		
O7+	0	0	0	0		
O6	0	0	0	0		
O5	0	15	4	19		
O4	0	29	8	37		
O3	49	40	17	106		
O2	2	1	1	4		
01	11	4	3	18		
Officers	62	89	33	184		
E9	0	3	2	5		
E8	0	17	9	26		
E7	0	66	38	104		
E6	94	111	25	230		
E5	197	166	41	404		
E4	282	91	22	395		
E3	96	15	4	115		
E2	10	1	0	11		
E1	2	0	0	2		
Enlisted	681	470	141	1,292		
Total	743	559	174	1,476		

Note: MFH units are retained in 2003. Source: Parsons Corporation, 2003

Note: Only the Floor Requirement is retained in 2008. Source: Parsons Corporation, 2003

Rental housing requirements, by grade and bedroom entitlements, for the remaining military families are allocated to price-bedroom market segments based on the MAHC (Table 6-8) of accompanied service members and the assumed expenditures pattern by the personnel within each pay grade. There are many external factors that affect housing choices. However, the purpose of the HRMA process is to assess if there is sufficient affordable housing in a local community. A minimum rental cost by bedroom is established to represent a minimum cost for acceptable rental units based on the actual spending patterns of military personnel below MAHC as derived from VHAS data accounting for changes in the quality and affordability of the current rental housing inventory. Service members are allocated to market segments between the minimum cost and their MAHC (tables 6-9 and 6-10). The projected military family rental demand by market segment is shown in 2003 dollars as military housing allowances and local rental prices are assumed to remain in the same relative proportion through 2008.

Table 6-8. Maximum Allowable Housing Cost With Dependents, 2003

Pay Grade	BAH	OOP	MAHC
O7+	\$1,222	\$121	\$1,343
O6	\$1,208	\$120	\$1,328
O5	\$1,198	\$119	\$1,317
O4	\$1,093	\$110	\$1,203
O3	\$941	\$98	\$1,039
O2	\$726	\$85	\$811
O1	\$630	\$75	\$705
E9	\$986	\$101	\$1,087
E8	\$892	\$95	\$987
E7	\$806	\$89	\$895
E6	\$728	\$85	\$813
E5	\$618	\$73	\$691
E4	\$538	\$68	\$606
E3	\$538	\$68	\$606
E2	\$538	\$68	\$606
<u>E1</u>	\$538	\$68	\$606

Source: U.S. Air Force, 2003

Table 6-9. Military Family Rental Requirement by Price Category, 2003

	Number	r of Bedro	oms	-
Price Range	Two	Three	Four+	Total
>\$1500	0	0	0	0
\$1250-\$1500	0	1	0	1
\$1000-\$1249	2	9	5	16
\$900-\$999	4	6	4	14
\$800-\$899	5	10	4	19
\$700-\$799	7	10	10	27
\$600-\$699	35	6	21	62
\$500-\$599	186	1	18	205
\$400-\$499	114	0	4	118
\$300-\$399	0	0	0	0
<\$300	0	0	0	0
Total	353	43	66	462

Source: Parsons Corporation, 2003

Table 6-10. Military Family Rental Requirement by Price Category, 2008

Price Range	Two	r of Bedro	Four+	Total
>\$1500	0	0	0	0
\$1250-\$1500	0	3	1	4
\$1000-\$1249	6	32	10	48
\$900-\$999	16	30	12	58
\$800-\$899	21	53	25	99
\$700-\$799	51	87	32	170
\$600-\$699	131	138	40	309
\$500-\$599	340	158	40	538
\$400-\$499	178	58	14	250
\$300-\$399	0	0	0	0
<\$300	0	0	0	0
Total	743	559	174	1,476

UNACCOMPANIED PERSONNEL REQUIRING RENTAL HOUSING

Unaccompanied personnel who are not required to reside in military quarters compete against civilian and military families seeking private sector housing. Unaccompanied personnel who elect to purchase homes are considered suitably housed and are not competed in the rental housing market. The proportion of unaccompanied personnel who seek rental housing in the private sector is estimated based on homeownership and rental rates derived from VHAS data summaries (Table 6-11).

Table 6-11. Tenure Rates for Unaccompanied Personnel

Pay Grade	Percentage Homeowners	Percentage Renters
O7+	69%	31%
O6	50%	50%
O5	62%	38%
O4	31%	69%
O3	52%	48%
O2	11%	89%
O1	0%	100%
E9	50%	50%
E8	42%	58%
E7	31%	69%
E6	24%	76%
E5	11%	89%
E4	10%	90%

Source: U.S. Air Force, 1995-1998

There are currently 293 unaccompanied personnel in pay grades E4 and above that comprise the private sector unaccompanied requirement for homeowner and rental housing as detailed in Chapter 3. An estimated 61 unaccompanied service members require homeowner housing (Table 6-12), and the remaining 232 unaccompanied service members require rental housing (Table 6-14).

There are projected to be 647 unaccompanied personnel in pay grades E4 and above. An estimated 96 unaccompanied service members will require homeowner housing (Table 6-13), and 551 unaccompanied service members will require rental housing (Table 6-15). Homeownership rates for unaccompanied personnel are expected to remain at 2003 levels.

Table 6-12. Unaccompanied Personnel Homeowner Requirement, 2003

Number of Bedrooms Pay Grade One Two Three Total 07+ О3 Officers E9 E8 E7 E6 E5 E4 Enlisted Total

Source: Parsons Corporation, 2003

Table 6-14. Unaccompanied Personnel Rental Requirement, 2003

	Number of Bedrooms				
Pay Grade	One	Two	Three	Total	
r dy Grade	Onc	140	111100	Total	
O7+	0	0	0	0	
06	0	0	0	0	
O5	0	0	1	1	
O4	0	0	6	6	
O3	0	23	0	23	
O2	0	5	0	5	
01	0	14	0	14	
Officers	0	42	7	49	
E9	0	1	0	1	
E8	0	2	0	2	
E7	0	10	0	10	
E6	0	32	0	32	
E5	138	0	0	138	
E4	0	0	0	0	
Enlisted	138	45	0	183	
-					
Total	138	87	7	232	

Source: Parsons Corporation, 2003

Table 6-13. Unaccompanied Personnel Homeowner Requirement, 2008

	Number	of Bedro	oms	
Pay Grade	One	Two	Three	Total
O7+	0	0	0	0
O6	0	0	0	0
O5	0	0	2	2
O4	0	0	2	2
O3	0	24	0	24
O2	0	1	0	1
01	0	0	0	0
Officers	0	25	4	29
E9	0	0	0	0
E8	0	1	0	1
E7	0	4	0	4
E6	0	10	0	10
E5	16	0	0	16
E4	36	0	0	36
Enlisted	52	15	0	67
Total	52	40	4	96

Source: Parsons Corporation, 2003

Table 6-15. Unaccompanied Personnel Rental Requirement, 2008

Nentai Nequirement, 2000					
	Numbe	r of Bedr	ooms		
Pay Grade	One	Two	Three	Total	
O7+	0	0	0	0	
O6	0	0	0	0	
O5	0	0	1	1	
O4	0	0	6	6	
O3	0	23	0	23	
O2	0	5	0	5	
O1	0	14	0	14	
Officers	0	42	7	49	
E9	0	1	0	1	
E8	0	2	0	2	
E7	0	10	0	10	
E6	0	32	0	32	
E5	137	0	0	137	
E4	320	0	0	320	
Enlisted	457	45	0	502	
Total	457	87	7	551	

Rental housing requirements by pay grade and bedroom category are allocated to price-bedroom market segments (tables 6-17 and 6-18), based on without-dependent rate MAHC (Table 6-16).

Table 6-16. Maximum Allowable Housing Cost Without Dependents, 2003

Pay Grade	BAH	OOP	MAHC
O7+	\$964	\$100	\$1,064
O6	\$945	\$98	\$1,043
O5	\$866	\$93	\$959
O4	\$814	\$90	\$904
O3	\$688	\$81	\$769
O2	\$590	\$72	\$662
01	\$458	\$63	\$521
E9	\$674	\$79	\$753
E8	\$639	\$76	\$715
E7	\$543	\$69	\$612
E6	\$469	\$64	\$533
E5	\$436	\$60	\$496
E4	\$392	\$53	\$445

Source: U.S. Air Force, 2003

Table 6-17. Unaccompanied Personnel Rental Requirement by Price Category, 2003

•	•		•	
	Number	of Bedro	oms	
Price Range	One	Two	Three	Total
>\$1500	0	0	0	0
\$1250-\$1500	0	0	0	0
\$1000-\$1249	0	0	0	0
\$900-\$999	0	0	0	0
\$800-\$899	0	0	2	2
\$700-\$799	0	7	3	10
\$600-\$699	0	14	2	16
\$500-\$599	0	24	0	24
\$400-\$499	89	33	0	122
\$300-\$399	49	9	0	58
<\$300	0	0	0	0
Total	138	87	7	232

Source: Parsons Corporation, 2003

Table 6-18. Unaccompanied Personnel Rental Requirement by Price Category, 2008

- 1			3 - 37	
	ooms			
Price Range	One	Two	Three	Total
>\$1500	0	0	0	0
\$1250-\$1500	0	0	0	0
\$1000-\$1249	0	0	0	0
\$900-\$999	0	0	0	0
\$800-\$899	0	0	2	2
\$700-\$799	0	7	3	10
\$600-\$699	0	14	2	16
\$500-\$599	0	24	0	24
\$400-\$499	197	33	0	230
\$300-\$399	260	9	0	269
<\$300	0	0	0	0
Total	457	87	7	551



CHAPTER 7. PRIVATE SECTOR RENTAL HOUSING ANALYSIS

This section summarizes the analysis of the private sector rental housing market to determine if there is sufficient private sector housing to meet the military requirements at the end of the five-year transition period. The analysis starts with the military families and unaccompanied personnel households currently residing in the housing market. Military families currently residing on base in excess of the Floor Requirement are assumed to transition to the private sector housing over the five-year study period. An equal proportion of the current excess on-base families are assumed to make the change each year so that by the fifth year only those families occupying the Floor Requirement remain in MFH.

For military families seeking rental housing, the sufficiency of the market to meet their requirements is determined through an allocation process in which only the currently available suitable rental housing is allocated to those military and civilian households currently seeking the available rental housing. The available, suitable rental housing are those suitable units vacated by military and civilian personnel during the year as they seek other housing in the market area or are relocating outside of the area plus any net additions to the rental supply through conversions or new construction. The analysis estimates the number of available units each year of the five-year study period. Net changes to the supply are determined through market response to changes in demand accounting for local contingencies and historical building cycles.

The active demand in each year is only those military and civilian families seeking housing in the market area including those moving from rental units in the market area and new military and civilian families moving into the market area. A portion of the families will continue to remain in their suitable housing units each year and not actively seek new housing.

The available suitable supply for the military is based on a competitive market share concept. As military personnel compete against civilian and other military demand in each market segment that are seeking housing, they are expected to be able to rent their share of the then-available rental units.

MILITARY RENTAL HOUSING REQUIREMENTS

As detailed in Chapter 6, private sector rental requirements for military families total 462 units in 2003 and 1,476 units in 2008. Private sector rental requirements for unaccompanied personnel are 232 units in 2003 and 551 units in 2008.

RENTAL HOUSING SUPPLY AVAILABLE TO THE MILITARY

The private sector housing market inventory available to military families and unaccompanied personnel is based on the turn over of those military and civilian households currently residing in the housing market plus net changes to the rental supply detailed in Chapter 5. Separate turnover rates were determined for military families, unaccompanied personnel, and civilian households by bedroom size (Table 7-1). Military turnover rates were estimated from data supplied by base housing staff. Civilian turnover rates were derived from interviews with property managers in communities surrounding the installation and combined with U.S. Bureau of the Census or other data as necessary.

Table 7-1. Turnover Rates for Households in Rental Housing

	Number of Bedrooms				
Household	One	Two	Three	Four+	
Civilians	46%	46%	33%	24%	
Military Families	N/A	44%	38%	44%	
Unaccompanied Personnel	50%	50%	50%	N/A	

Note: Turnover rates can be expressed in years (i.e., 50 percent represents two years). Source: Holloman AFB Housing Office, 2003; Parsons Corporation, 2003

RENTAL HOUSING SUPPLY ALLOCATED TO THE MILITARY

The dynamic process assesses the housing market each year of the five-year period. It considers annual changes, if any, in total authorized manpower and changes in the demand for private sector housing from military personnel assuming the installation adjusts its current inventory of U.S. Government-controlled housing to its Floor Requirement. A military market share is computed for each year of the analysis based on competition of only those military and civilian households actively seeking housing during the year and available rental units either turning over or newly constructed in the market.

The annual share of suitable rental housing to military requirements is shown in Table 7-2. The analysis indicates that an additional 134 military families would be successful in obtaining suitable rental units over the next five years. There is still an additional requirement or shortfall of 1,260 suitable community rentals if Holloman AFB is to retain only the Floor Requirement by 2008. Unaccompanied personnel actually experience a net loss of six suitable rentals over the study period; thus, they require an additional 538 units in order to meet their requirement.

Table 7-2. Military Market Share of Suitable Rental Housing, 2003-2008

Component	2003	2004	2005	2006	2007	2008
Military Family Renters	1,727	1,726	1,725	1,724	1,723	1,722
 Excess MFH Units Retained 	1,019	815	611	408	204	0
- Floor Requirement	246	246	246	246	246	246
Off-Base Military Renters	462	665	868	1,070	1,273	1,476
- Military Family Market Share	82	112	143	169	193	216
Private Sector Shortfall	380	553	725	901	1,080	1,260
Off-Base Unaccompanied Renters	232	296	360	424	487	551
- Unaccompanied Market Share	19	18	17	16	14	13
Private Sector Shortfall	213	278	343	408	473	538

PRIVATE SECTOR RENTAL HOUSING SHORTFALL

As determined by the allocation analysis through 2008, the private sector housing shortfall of 1,260 units for military families is presented in Table 7-3. The private sector housing shortfall of 538 units for unaccompanied personnel is presented in Table 7-4. The private sector shortfall for unaccompanied personnel represents an actual deficit of community housing because no units are available on base for these personnel. No further quantification is required for unaccompanied personnel.

Table 7-3. Rental Housing Shortfall for Military Families, 2008

Price Range	Two	Three	Four+	Total
>\$1500	0	0	0	0
\$1250-\$1500	0	0	0	0
\$1000-\$1249	0	1	3	4
\$900-\$999	2	2	12	16
\$800-\$899	2	50	25	77
\$700-\$799	11	87	32	130
\$600-\$699	67	138	40	245
\$500-\$599	340	158	40	538
\$400-\$499	178	58	14	250
\$300-\$399	0	0	0	0
<\$300	0	0	0	0
Total	600	494	166	1,260

Source: Parsons Corporation, 2003

Table 7-4. Rental Housing Shortfall for Unaccompanied Personnel, 2008

Price Range	One	Two	Three	Total
>\$1500	0	0	0	0
\$1250-\$1500	0	0	0	0
\$1000-\$1249	0	0	0	0
\$900-\$999	0	0	0	0
\$800-\$899	0	0	2	2
\$700-\$799	0	1	3	4
\$600-\$699	0	7	2	9
\$500-\$599	0	24	0	24
\$400-\$499	197	33	0	230
\$300-\$399	260	9	0	269
<\$300	0	0	0	0
Total	457	74	7	538

CHAPTER 8. TOTAL MILITARY FAMILY HOUSING REQUIREMENT

This chapter summarizes the results and determination of the Total Military Family Housing Requirement for Holloman AFB.

The dynamic process produces annual results as shown in Table 8-1. There is an initial deficit or need for an additional 201 MFH units at Holloman AFB. As more military families are transitioned to the local community in an attempt to reduce the MFH inventory to the Floor Requirement, an additional number become unsuitably housed while others are able to obtain suitable private sector rental units. Military families are unable to capture a sufficient portion of the local rental market so that the projected inventory would be able to meet the needs of all unsuitably housed personnel by 2008 and, thus, resulting in a deficit of 93 MFH units. The deficit is exacerbated by the reduction in the MFH inventory to 1,413 units in 2004.

Table 8-1. Summary of the Total Military Family Housing Requirement, 2003-2008

Component	2003	2004	2005	2006	2007	2008
Private Sector Shortfall	380	553	725	901	1,080	1,260
+ Excess MFH Units Retained	1,019	815	611	408	204	0
+ Floor Requirement	246	246	246	246	246	246
Total Military Family Housing Requirement	1,645	1,614	1,582	1,555	1,530	1,506
- Military Family Housing	1,444	1,413	1,413	1,413	1,413	1,413
Deficit/(Surplus)	201	201	169	142	117	93

Source: Parsons Corporation, 2003

The Floor Requirement totals 246 units in 2008 (Table 8-2). This represents the minimum military family housing requirement the installation attempts to transition to based on the local communities ability to suitably house all excess military demand over the study period.

The local community cannot suitably house all excess military family renters, thus a private sector housing shortfall is said to exist. The private sector shortfall totals 1,260 units as 1,476 military family renters are successful in obtaining only 216 suitable rental units by 2008 (Table 8-3).

The Total Military Family Housing Requirement, based on the sum of the Floor Requirement and the private sector housing shortfall, is 1,506 units (Table 8-4).

Table 8-2. Floor Requirement, 2008

Table 8-3. Private Sector Shortfall, 2008

Number of Bedrooms						
Pay Grade	Two	Three	Four+	Total		
O7+	0	0	1	1		
O6	0	0	11	11		
O5	0	8	3	11		
O4	0	4	2	6		
O3	10	5	2	17		
O2	0	0	0	0		
O1	2	0	0	2		
Officers	12	17	19	2 48		
E9	0	2	1	3		
E8	0	3	2	5		
E7	0	15	6	21		
E6	13	13	10	36		
E5	34	19	10	63		
E4	41	10	3	54		
E3	12	2	1	15		
E2	1	0	0	1		
E1	0	0	0	0		
Enlisted	101	64	33	198		
Total	113	81	52	246		

	Numb	er of Bedro	ooms	
Pay Grade	Two	Three	Four+	Total
O7+	0	0	0	0
O6	0	0	0	0
O5	0	0	1	1
O4	0	5	5	10
O3	6	22	15	43
O2	1	1	1	3
01	8	4	3	15
Officers	15	32	25	72
E9	0	1	2	3
E8	0	12	9	21
E7	0	65	38	103
E6	40	111	25	176
E5	155	166	41	362
E4	282	91	22	395
E3	96	15	4	115
E2	10	1	0	11
E1	2	0	0	2
Enlisted	585	462	141	1,188
Total	600	494	166	1,260

Source: Parsons Corporation, 2003

Source: Parsons Corporation, 2003

Table 8-4. Total Military Family Housing Requirement, 2008

Number of Bedrooms										
Pay Grade	Two	Three	Four+	Total						
O7+	0	0	1	1						
O6	0	0	11	11						
O5	0	8	4	12						
O4	0	9	7	16						
O3	16	27	17	60						
O2	1	1	1	3						
01	10	4	3	17						
Officers	27	49	44	120						
E9	0	3	3	6						
E8	0	15	11	26						
E7	0	80	44	124						
E6	53	124	35	212						
E5	189	185	51	425						
E4	323	101	25	449						
E3	108	17	5	130						
E2	11	1	0	12						
<u>E1</u>	2	0	0	2						
Enlisted	686	526	174	1,386						
Total	713	575	218	1,506						



CHAPTER 9. FINDINGS

This chapter reports the HRMA conclusions for Holloman AFB by addressing the following topics:

- ♦ Military Housing Requirements
- ♦ Housing Market Area
- ♦ Housing Supply
- ♦ Military Housing Demand

MILITARY HOUSING REQUIREMENTS

The findings of the study conclude the following for 2008:

MILITARY COMMUNITY HOUSING REQUIREMENT

The on-base community criterion requires military housing for 10 percent of all military families by pay grade. This requirement is projected to total 230 housing units.

KEY AND ESSENTIAL HOUSING REQUIREMENT

There are projected to be 28 key and essential positions at Holloman AFB.

HISTORIC HOUSING REQUIREMENT

There are no projected historic housing units at Holloman AFB.

QUALITY OF LIFE HOUSING REQUIREMENT

There are projected to be no members with RMC below 50 percent of the median family income in the housing market area.

FLOOR REQUIREMENT

The Floor Requirement, based on the greater of each of its components by pay grade, totals 246 MFH units.

PRIVATE SECTOR HOUSING SHORTFALL FOR MILITARY FAMILIES

There is a projected requirement for 1,260 additional suitable private sector rental units for military families.

TOTAL MILITARY FAMILY HOUSING REQUIREMENT AND BALANCE

The Total Military Family Housing Requirement, based on the sum of the Floor Requirement and the private sector housing shortfall by pay grade, totals 1,506 MFH units. There is a *deficit* of 93 units as the Total Military Family Housing Requirement is greater than the projected inventory of 1,413 units (Table 9-1).

Table 9-1. Balance of Military Family Housing Requirements, 2008

Component	Housing Units
Military Family Housing Inventory (FY 2004)	1,413
Total Military Family Housing Requirement Floor Requirement Private Sector Shortfall	1,506 246 1,260
Deficit/(Surplus)	93

Source: Parsons Corporation, 2003

The Total Military Family Housing Requirement by pay grade is summarized in Table 9-2.

Table 9-2. Holloman Air Force Base Total Military Family Housing Requirement, 2008

	Military	Military	Key &	Historic	Quality	Floor	Private Sector	Total Military Housing
Pay Grade						Requirement		
-						-		
O7+	1	0	1	0	0	1	0	1
O6	8	1	11	0	0	11	0	11
O5	51	6	11	0	0	11	1	12
O4	62	6	4	0	0	6	10	16
O3	168	17	0	0	0	17	43	60
O2	4	0	0	0	0	0	3	3
01	22			0	0	2	15	
Officers	316	32	27	0	0	48	72	120
E9	23	3	1	0	0	3	3	6
E8	49		0	0	0	5	21	26
E7	205		0	0	0	21	103	
E6	364	36	0	0	0	36	176	212
E5	628	63	0	0	0	63	362	425
E4	537		0	0	0	54	395	449
E3	138	_	0	0	0	15	115	
E2	12	1	0	0	0	1	11	12
E1	2		0	0	0	0	2	2
Enlisted	1,958	198	1	0	0	198	1,188	1,386
Total	2,274	230	28	0	0	246	1,260	1,506

Source: Parsons Corporation, 2003

PRIVATE SECTOR HOUSING SHORTFALL FOR UNACCOMPANIED PERSONNEL

There is a projected requirement for 538 additional suitable private sector rental housing units for unaccompanied personnel in pay grades E4 and above.

HOUSING MARKET AREA

Holloman AFB is located approximately eight miles southwest of the City of Alamogordo in south central New Mexico. The housing market area includes portions of Dona Ana and Otero counties. The northern edge extends to the Lincoln County line along U.S. Highway 54 and is limited by the Mescalero Apache Indian Reservation. The eastern boundary includes the City of Cloudcroft and approaches, but does not include, the City of Mayhill along U.S. Highway 82. In the western direction, the housing market area boundary extends through the White Sands Missile Range, but does not include any portion of the City of Las Cruces along U.S. Highway 70. The southern boundary is limited to the City of Orogrande along U.S. Highway 54 due to the restricted boundaries of White Sands Missile Range and Fort Bliss. The City of Alamogordo is the largest population and housing center in the housing market area.

HOUSING SUPPLY

There is a total private housing stock of 27,101 units, including 16,443 homeowner units, 7,526 rental units, and 3,132 other units. An annual growth rate of 1.8 percent was estimated and used to project that the total private housing supply would increase to 29,619 units in 2008 consisting of 18,278 homeowner units, 7,849 rental units, and 3,492 other units.

Holloman AFB currently has 2,491 housing units including 1,444 traditional on-base MFH units and 1,047 UEPH units. The inventory is expected to decrease to 2,460 due to a reduction of 31 MFH units by 2008.

MILITARY HOUSING DEMAND

The Holloman AFB housing office is currently responsible for supporting 3,929 military personnel including both Air Force and tenant personnel. This number is expected to decrease to 3,896 in 2008.

Currently, there are 2,291 military families after subtracting military couples and voluntary separated personnel. There are 1,279 unaccompanied personnel, of which 293 require private sector housing.

In 2008, there are projected to be 2,274 military families and 1,266 unaccompanied personnel, of which 647 will require private sector housing.

CHAPTER 10. REFERENCES

Bureau of Labor Statistics, Local Area Unemployment Statistics, 2003.

Claritas, Inc., Claritas Connect, 2003.

Holloman AFB Housing Office, *Information on community housing, base demographics, homeownership, and housing inventory*, 2003.

Otero County Association of Realtors, Residential Sales Information, 2003.

Parsons Corporation, Estimates prepared for this study, 2003.

- U.S. Air Force, *Holloman AFB, NM 1994-1997 Variable Housing Allowance Survey Data*, 1995-1998.
- U.S. Air Force, *Information on housing allowances, out-of-pocket expenses, housing policies, and regular military compensation,* 2003.
- U.S. Bureau of the Census, 1990 Census of Population and Housing, Summary Tape File 1 (STF 1) 100 Percent Data, 1991.
- U.S. Bureau of the Census, *Census 2000 Summary File 1 (SF 1) 100 Percent Data*, 2001.
- U.S. Bureau of the Census, Census 2000 Summary File 3 (SF 3) Sample Data, 2001.
- U.S. Bureau of the Census, *Housing Vacancies and Homeownership Annual Statistics: 2002, 2003.*
- U.S. Department of Defense, *Selected Military Compensation Tables*, Directorate of Compensation, January 2003.
- U.S. Department of Housing and Urban Development, *Otero County Median Family Income*, 2003.
- Woods & Poole Economics, Inc., *The Complete Demographic Data Source 2002*, Washington D.C., 2002.

CHAPTER 11. CONTACTS

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- Scharf, Major David. ACC Housing Operations Section Chief. HQ ACC/CEPHO. 129 Andrews Street, Suite 102, Langley AFB, Virginia 23665. (757) 764-0801.

The following property management firms and apartments where surveyed

Alamogordo Realty
Capri Manor Apartments
Century 21 Casa, Inc.
Coldwell Banker
Desert Sands Property Rentals
ERA Simmons Real Estate
Hunter's Ridge Apartments

Los Arcos Apartments
Monte Vista Townhouses
RE/Max of Alamogordo
Starlight Court Apartments
The Pines Apartments
Westgate Apartments